

SUrface NAnostructuring and Growth (SUNAG) laboratory Institute of Physics, Bhubaneswar

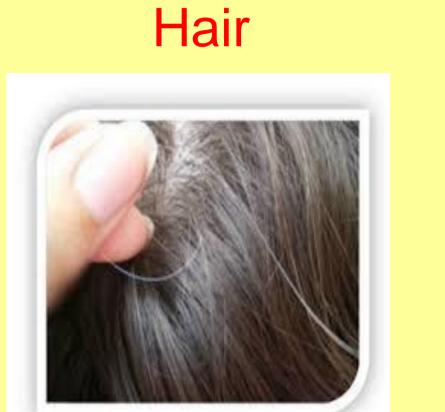


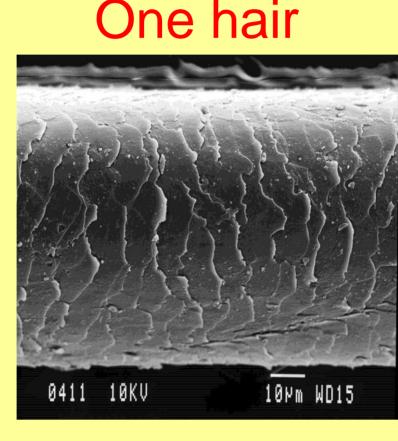
Thrust areas of research

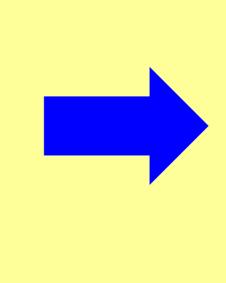
Ion-beam fabrication of materials: Ripples, nanodots, facets

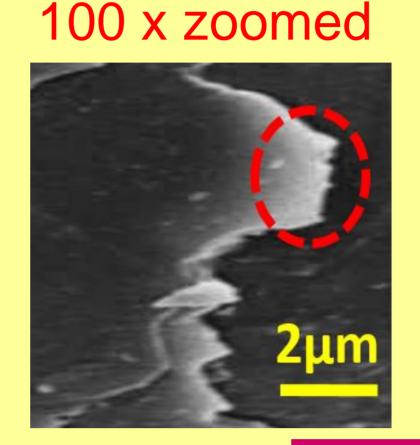
Growth of 3-D nanostructures and thin films

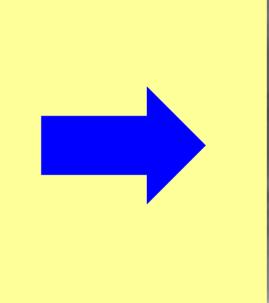
Journey from micro- to nano-structures

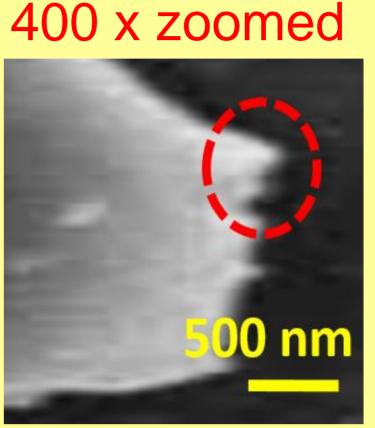


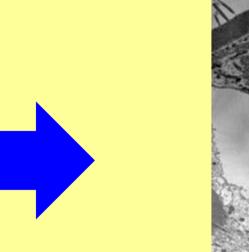


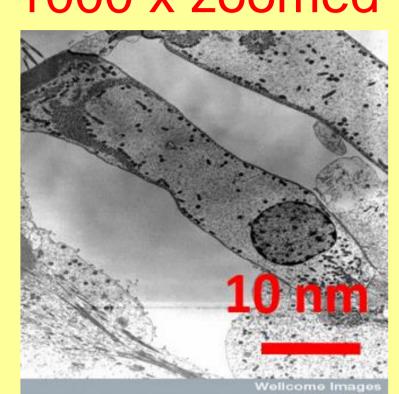






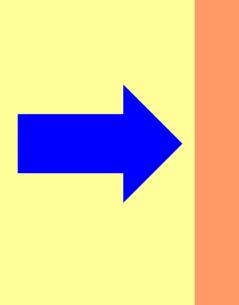


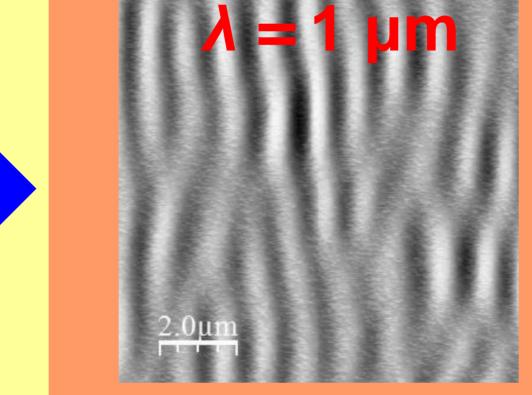


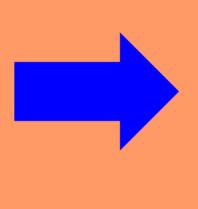


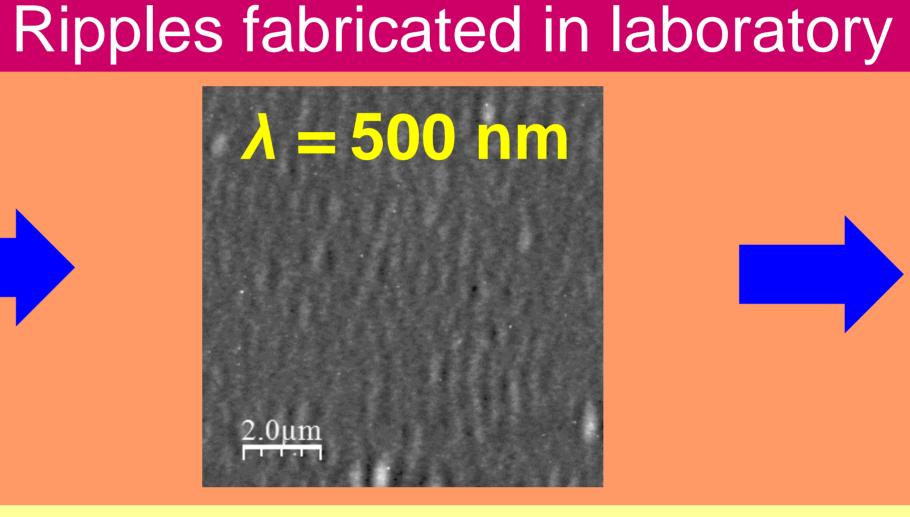
Natural ripples

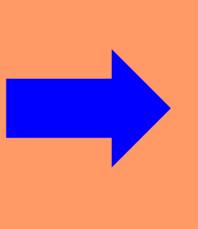


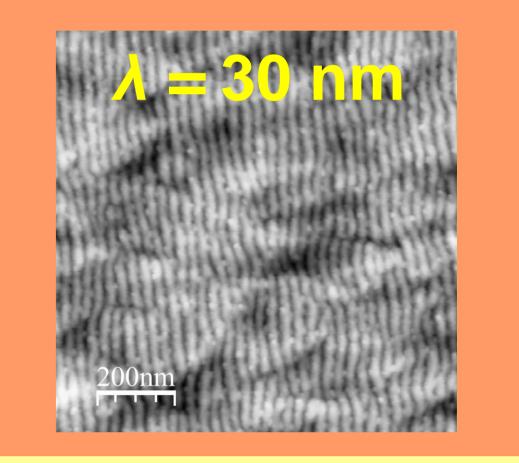












Potential applications of patterned surfaces

Ion-beam Polishing

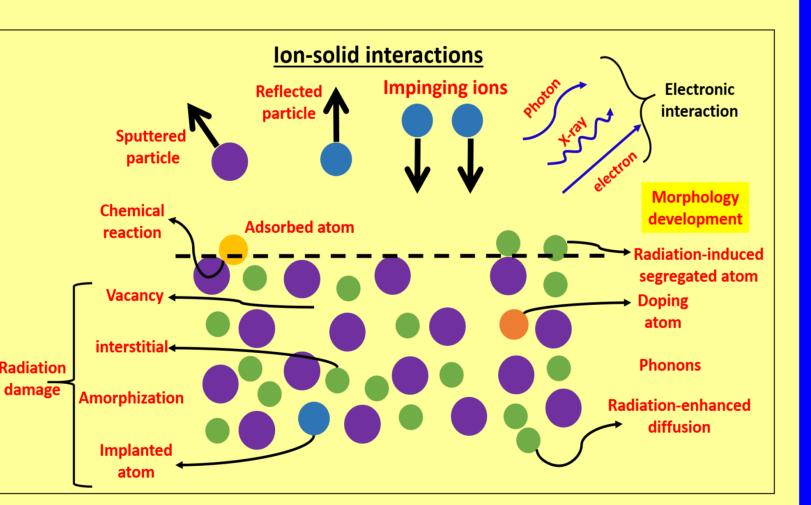
Plasmonics

Nanoscale Magnetism

Solar Cells

Ion-beam setup

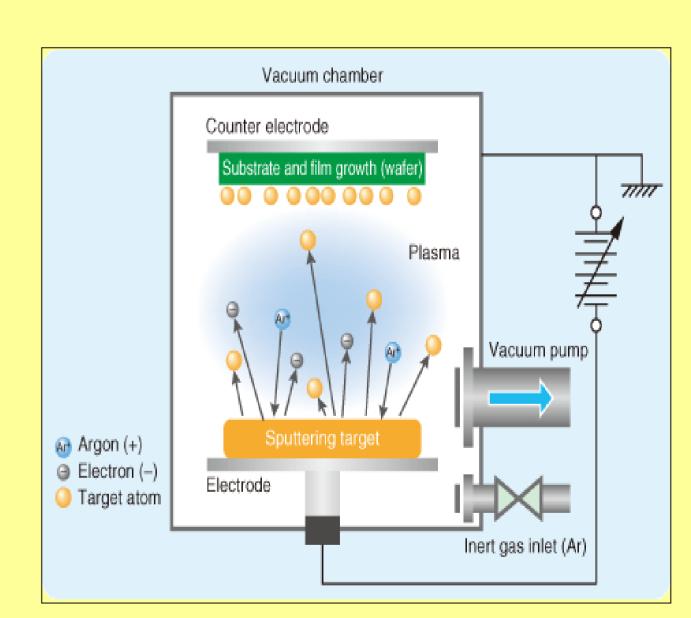




This system is used to fabricate the of nano-structures at surfaces of different materials

DC/RF sputtering setup

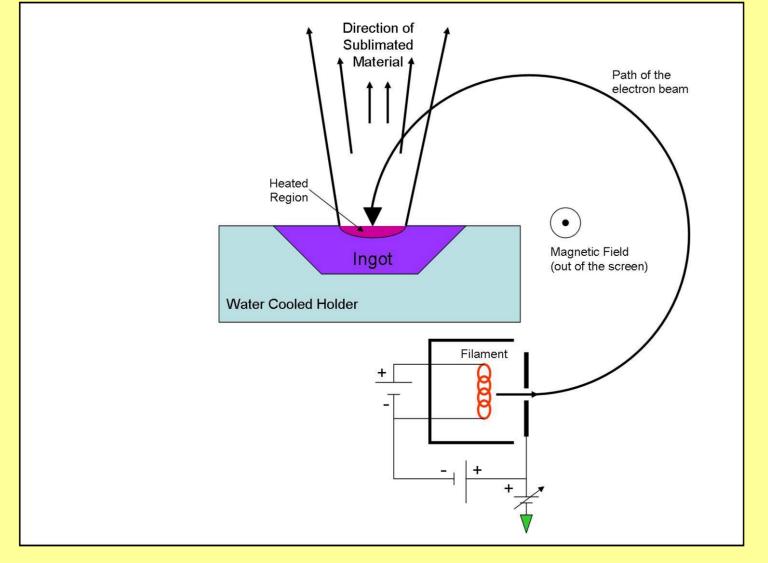




This system is used to grow thin films

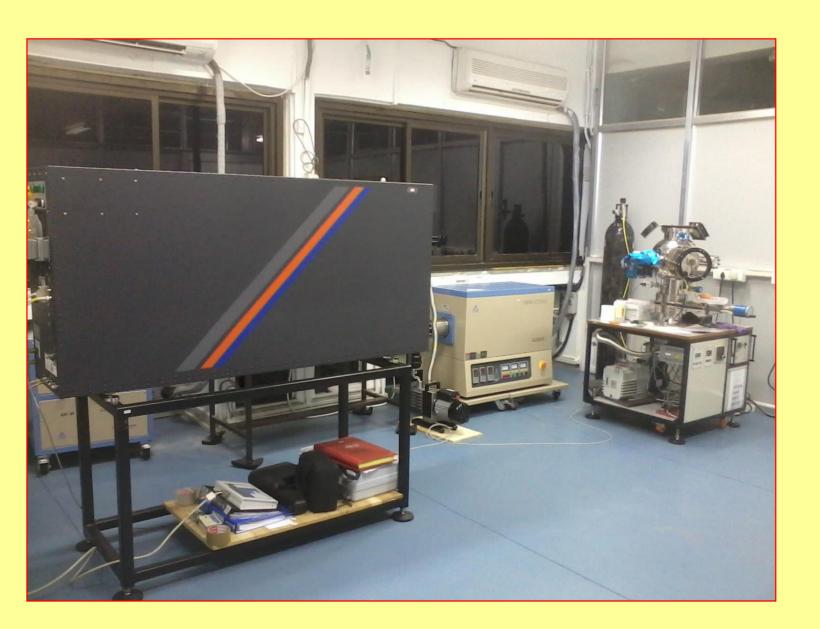
Electron-beam evaporation setup

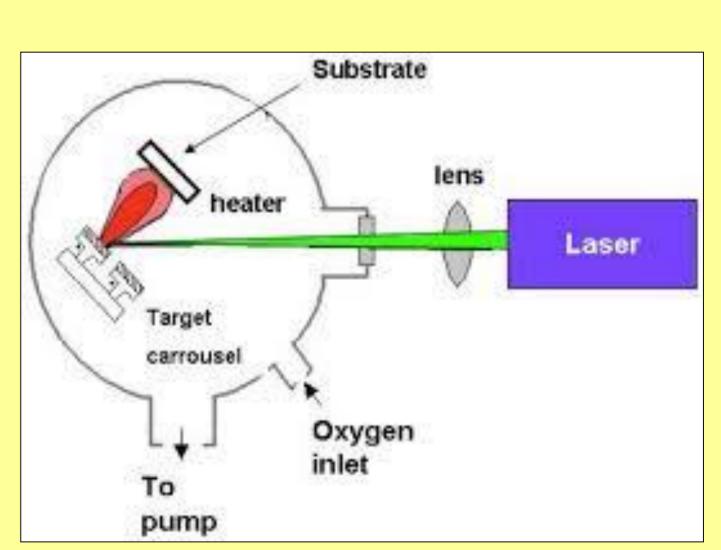




This system is used to grow thin films

Pulsed laser deposition setup





This system is used to grow thin films